$a_0 = C_0 = 2$

$a_1 = 2, \; b_1 = 0$

$a_2 = 2, \; b_2 = 0$

$a_3 = 0, \; \vdots$

$a_4 = 0, \; \vdots$

$\vdots$

$C_k = \frac{a_k - i b_k}{2}$

$C_{-k} = \frac{a_k + i b_k}{2}$

$C_1 = \frac{2 - i(0)}{2} = 1$

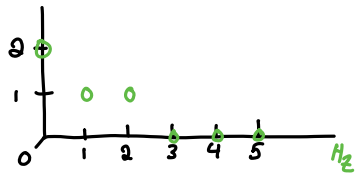
$C_2 = \frac{2 - i(0)}{2} = 1$

$C_3 = 0$

$C_4 = 0$

$\vec{C} = [2, 1, 1, 0, 0, \ldots]$

$\left\{ \left(\frac{0}{T}, 2\right), \left(\frac{1}{T}, 1\right), \left(\frac{2}{T}, 1\right), \ldots \right\}$



$f(t) \cong c_1 g_1(t) + c_2 g_2(t) + \ldots + c_n g_n(t)$